

USREDCOM PAMPHLET 525-7
TAC PAMPHLET 100-13
TRADOC PAMPHLET 525-40
USLANTCOM PUB 621-1
USCENTCOM PAMPHLET 525-1

SYSTEM MANUAL FOR EMPLOYING TRI-TAC
EQUIPMENT IN JOINT COMMUNICATIONS SYSTEMS

3rd EDITION

1 JUNE 1986

VOLUME I

JOINT COMMUNICATIONS SYSTEMS ARCHITECTURE
AND MANAGEMENT PROCEDURES

Supersession: Volume I is the first in a series of six volumes of the 3rd Edition. This new Volume I supersedes Volume I of the 2nd Edition.

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3-5.2. UHF Satellite Planning Factors. Special purpose point-to-point circuits are provided to the joint tactical user over existing UHF satellite facilities. These include both the AFSATCOM network and the FLTSATCOM network. However, it should be noted that normal access for joint exercises contingencies is through the AFSATCOM wideband channels supported by UHF transponders. These transponders are located on the FLTSATCOM satellites, Satellite Data Systems (SDS) satellites, and Lincoln Experimental Satellites 8 and 9 (LES 8 and 9). Since these satellites are also shared by many users, a control mechanism has been established for accessing and using these facilities. Procedures to be followed for gaining access to these networks are outlined in a document entitled: "AFSATCOM Communications Control and Operational Concepts (C)," (Reference A-13). Communications channels supported by these links to either AUTOVON, AUTODIN, or AUTOSEVOCOM facilities can be extended at selected UHF terminal locations as discussed in Reference A-13. Factors that must be considered by the joint planner are discussed below.

3-5.2.1. UHF Satellite Access Request. Figure 3-2 depicts the message format used to request access to the UHF satellite network. Primary Control Centers (PCCs) for this network are listed in Table 3-1. Unless otherwise directed, users west of the Mississippi River should send request messages to 33 ISG MARCH AFB CA//DODB/, and users east of the Mississippi should send requests to DET 2 2045CG BRANDYWINE MD//DOND//. Information copies should be sent to SISD OFFUTT AFB NE//YKO/YKOP//. Characteristics of the AN/WSC-3 used as a UHF ground terminal in this net are discussed in Volume IV, Chapter 17. System performance factors that must be considered are discussed below.

3-5.2.2. UHF Satellite System Performance Parameters. The AN/MS-71 UHF satellite terminals are upgraded terminals that will allow operation in either the narrowband (5 kHz) or wideband (25 kHz) channels. The AN/URC-101 UHF terminal operates in the 25 kHz mode and is compatible with the AN/MS-71 (or AN/WSC-3) in the wideband mode of operation. Details which must be considered in UHF satellite system engineering are discussed in Volume IV, Chapter 16.

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Table 3-1. Primary Control Center (PCC) Satellite Assignment

Present

<u>Satellite</u>	<u>PCC</u>	<u>Alt PCC</u>
100° West	March AFB	Brandywine
23° West	Brandywine	Offutt AFB
172° East	March AFB	Eielson AFB
72° East	Mildenhall	Navy
IES 8/9	Brandywine	MIT Lincoln Labs
SDS	Offutt AFB	Brandywine

Final (Post CY 84)

<u>Satellite</u>	<u>PCC</u>	<u>Alt PCC</u>
100° West	Brandywine	March AFB
23° West	Mildenhall	Brandywine
172° East	March AFB	Kadena AFB
72° East	Kadena AFB	Mildenhall
SDS	Brandywine	Offutt AFB

IMAGERY: INTERPRETATION